R E P O R T R E S U M E S

ED 012 071 CG 000 230

CONCEPTS EMPLOYED BY ACCURATE AND INACCURATE CLINICIANS.

BY- VAN ATTA, RALPH E.

PUB DATE MAR 67

EDRS PRICE MF-$0.09 HC-$0.88 22P.

DESCRIPTORS- PSYCHIATRISTS, SOCIAL WORKERS, PSYCHOLOGISTS, *COUNSELING, *BEHAVIOR THEORIES, *THOUGHT PROCESSES, *PSYCHOLOGICAL EVALUATION, *INTERPERSONAL RELATIONSHIP, Q SORT

STATEMENTS MADE BY A THERAPY CLIENT WERE TYPED ON SMALL CARDS AND PRESENTED AS AN ARRAY TO 18 SUBJECTS. EACH SUBJECT CATEGORIZED THESE STATEMENTS TO REPRESENT CONCEPTS HE USED IN CONCEPTUALIZING THE CLIENT. ON COMPLETING THIS TASK, EACH SUBJECT DESCRIBED THE CLIENT USING A Q-SORT. DESCRIPTIVE ACCURACY WAS DEFINED CONSENSUALLY VIA FACTOR ANALYSIS OF Q-SORT INTERCORRELATIONS. THE RESEARCH TASK FAILED TO DIFFERENTIATE BETWEEN FOUR HIGHLY ACCURATE SUBJECTS AND FOUR HIGHLY INACCURATE SUBJECTS IN TERMS OF (1) THE DIVERSITY OF THEIR CONCEPTUALIZATIONS, (2) THE PERMEABILITY OF THEIR CONCEPTS, (3) THE NUMBER OF CLIENT EVENTS INCORPORATED IN THEIR CONCEPTS, AND (4) THE ARRANGEMENT OF ITEMS IN CONCEPTS. IN ADDITION, THE THEORY ENDORSED AND THE LANGUAGE EMPLOYED DID NOT RELATE TO DESCRIPTIVE ACCURACY. IMPLICATIONS ARE THAT THE RESEARCH METHOD EMPLOYED REVEALS THE IDIOSYNCRATIC ASPECTS OF CLINICAL THINKING BUT LITTLE ABOUT THE LAWFUL PROCESSES WHICH ENABLE CLINICIANS TO CONVERGE AS THEY DID ON THE CRITERION. (AUTHOR)

CONCEPTS EMPLOYED BY ACCURATE AND INACCURATE CLINICIANS

Statements made by a therapy client were typed on small cards and presented as an array to eighteen subjects. Each subject categorized these statements to represent concepts he used in conceptualizing the client. On completing this task, each subject described the client using a Q-sort. Descriptive accuracy was defined consensually via factor analysis of Q-sort intercorrelations. The research task failed to differentiate between four highly accurate subjects and four highly inaccurate subjects in terms of (1) the diversity of their conceptualizations; (2) the permeability of their concepts; (3) the number of client events incorporated in their concepts; and (4) the arrangement of items in concepts. In addition, the theory endorsed and the language employed did not relate to descriptive accuracy. Implications are that the research method employed reveals the idiosyncratic aspects of clinical thinking but little about the lawful processes which enable clinician's to converge as they did on the criterion. (Author)

CG 000 230

CONCEPTS EMPLOYED IN CLINICAL THINKING BY ACCURATE AND INACCURATE CLINICIANS

by

Ralph E. Van Atta

The University of Texas

Any trained person who practices counseling and psychotherapy, whether counseling or clinical psychologist, psychiatrist, or social worker, is a clinician for purposes of this paper. Previous research has suggested that the thought processes used by clinicians are of an intuitive-inductive nature (McArthur, 1954) with personality theory playing an obscure to unimportant role (Elkin, 1947; McArthur, 1954). Consistent with these findings have been reports that the clinician's thinking does not follow a systematic pattern of scientific hypothesis making and testing (Koester, 1954; Parker, 1958). Indeed, viewed as a process of concept formation, accuracy of the clinician's personality descriptions appears to be related to his ability to entertain many possibilities simultaneously (Van Atta, 1966). While some progress has been made in describing thought processes, practically nothing has been accomplished in the way of revealing the nature of the concepts, the abstractions about behavior employed by clinicians.

THE PROBLEM

Ability to function effectively in counseling, to make timely, client enabling responses, is often attributed to the validity of a clinician's working model or conceptualization of his client (Pepinsky, 1954; Pepinsky and Pepinsky, 1954; Tyler, 1961; Layton, 1961). Presently no methods exist which permit adequate description of clinical models and few efforts have been made to subject clinical concepts to systematic analysis. The purposes of the present study were to describe and compare some client conceptualizations attained by clinician's who varied in the accuracy of their client descriptions. Specifically, the research purposes

were to explore relationships between accuracy of personality description and five characteristics of the conceptualizations of clinician-subjects: (1) permeability-impermeability of concepts; (2) homogeneity-diversity of the clinician's conceptualization; (3) number of client events conceptualized; (4) personality theory employed in the conceptual process; and (5) similarity of concepts employed.

The Permeability-impermeability dimension of thinking (Kelly, 1955) is reflected in broad or many-itemed concepts. The size of a concept indicates the number of different types of events it can subsume. That is, the larger a concept, the more permeable it is in that it will tend to include a broader range of items. Either extreme of the permeability dimension might result in behavioral inadequacy. Small (narrow) concepts reflect greater cognitive control and rigidity and are related to attitudes of narrowness, excessively precise verbalization, and mechanistic behavior. Permeable concepts, on the other hand, are related to excessively vague, diffuse responses.

Diversity of thinking is reflected in the range of different concepts employed (Parker, 1958). Diversity interacts with permeability of concepts, especially when the number of events in the stimulus field is restricted (as it must be for research purposes). Thus, a conceptualization which is extremely homogeneous (i.e., all events subsumed under a single category) also involves permeable concepts. Thinking may also be so diverse as to consist of one concept for each client event. The dimension of homogenity-diversity in a construction system is analogous to the issue of oversimplification versus parsimony in psychological theory. Excessive diversity would result, by analogy

to theory, in confusion; oversimplification (homogeneity) would relate to imprecision and failure to make essential predictions.

Number of client events conceptualized is related to the notion of "noise" in information theory. Noise (static) is a source of stimuli but not of information. Noise reduction would result, presumably, in greater fidelity, in ability to hear or perceive more clearly. On experiencing considerable cognitive strain, pertinent data may be treated as noise, that is, valuable information may be disregarded to effect a reduction in the number of events to be considered. It seems likely that the effect of this variable on conceptual accuracy is an interaction of the capacity of the organism to deal with cognitive complexity, the actual number of variables interacting and the amount of irrelevant information in the stimulus field.

Theoretical constructs are reflected in the terminology used by a clinician and in the theory he formally endorses. It has been asserted that personality theory is a matter of personal preference which serves, primarily, the therapist's conceptual needs (Shoben 1962). Moreover, it has been suggested that personality theory will impose constraints on the kinds of client behavior the therapist anticipates (Van Atta and Kemp, 1964). For example, to perceive a client as "vengeful" implies a different kind of behavior than to regard him as "aggressive". So it is, that personality theory employed by a clinician may relate to which client behaviors he anticipates and how accurately he predicts them.

In a more general way, the constructs used by a clinician whether they derive from formal personality theory or "common sense" (informed

theory?) from logical or prelogical process, influence predictive and descriptive accuracy. Clinicians who concur in the descriptions they make explicit should also concur in the concepts they implicitly form. Thus, while agreement may not be evident at the level of theoretical constructs (verbalizations) it may be demonstrable at a more concrete level (similarity in the constituents of concepts rather than in the labels assigned to them). Ability to achieve agreement with others, it is to be noted, also interacts with permeability. Just as more permeable concepts readily subsume a variety of events, so also are they able to subsume a greater variety of concepts. Clinicians tend to become global in their thinking (and perhaps relatively more global thinkers tend to gravitate to clinical activity) because globality of thought,or permeability of concepts tends to relate positively to interpersonal confluence. Thus, agreement in concepts is a product of two factors, permeability of concepts and similarity of construing:

$$A = Pe \times Si$$

Both A (agreement) and Pe (permeability) may be operationally defined: agreement in terms of a comparison of the items included in representations of concepts and, as suggested previously, permeability in terms of concept size. By means of the above equation, similarity of conceptualizations (Si) can be operationally defined as A/Pe.

Factors such as receptivity and flexibility may also be crucial dimensions in clinical thinking. Receptivity, or the dimension referred to as openness of mind (Rokeach, 1960), is an attitudinal factor which may be pertinent to the capacity of the clinician to adapt to new information and to revise established sets (Dailey, 1952; Van Atta, 1966).

This factor as well as flexibility of thinking may be related to capacities to adapt to others in a manner which is personal, that is, individualized and non-stereotypic. These two factors are mentioned because they seem logically pertinent to the emerging model of clinical thinking which is outlined here. Hypotheses pertinent to these factors are not presented in this article.

METHOD

Eighteen clinicians, including counseling and clinical psychologists, psychiatrists and social workers, were asked to describe a psychotherapy client based upon statements made by him in psychotherapy. To obtain a representation of concepts, client statements were presented as an array of discrete items which the subject was asked to categorize. In categorizing, a subject was permitted to use any number of categories with no restrictions on category size. If he regarded some items as trivial or unimportant, he was permitted to assign these to a discard pile. When the judge was finished categorizing, he was asked to arrange his categories from most to least important and to report verbally what each concept represented. Operational definitions of the variables under study were as follows: diversity-homogeneity is reflected in number of different categories; permeability-impermeability is indicated by category size; noise reduction is defined by discard frequency; theory employed is suggested by name of theory used by clinician to describe his therapy and also by names assigned to concepts; similarity between two concepts is defined as the ratio of the number of items held in common by the two concepts to the total number of items they contain. In attempting to discover relationships between descriptive accuracy and the concepts employed, eight subjects, four

highly accurate and four highly inaccurate, were selected from an original sample of eighteen subjects.

On completing the research task, each subject completed a criterion instrument, a 100 item Q-sort (Block, 1961). This Q-sort, the California Q-set, is an interdisciplinary, theory-fair means of describing personality. To derive descriptive accuracy scores, each subject's Q-sort description was intercorrelated with that of every other subject and with a sort provided by the client's therapist. The resulting intercorrelations were factor analyzed. This analysis revealed a single general factor on which the therapist had high positive loadings. Loadings on the general factor were used as descriptive accuracy scores. Thus the researcher's definition of descriptive accuracy was consensual. High communality with the consensus (general factor) would suggest ability to describe the client so that he could be recognized by fellow professionals. Further supporting the interpretation of the factor loading as reflecting descriptive accuracy was the fact that the consensus included a major proportion of the variance of the therapist's description. Thus a high loading on the general factor runs counter to interpreting it as a "generalized-other factor". Indeed, agreement with the general factor would seem to reflect the ability of a clinician to describe a client as if he had spent time in therapy with him.

RESULTS

The concepts developed by the subjects are shown in Table 1 and 2 by descriptive accuracy group. It will be immediately apparent that there were no systematic differences between accurate and inaccurate subjects

in the number or size of categories they employed. This was consistent with the general findings for all eighteen subjects. It may be noted, however, that one of the less accurate subjects, S7, used only two very large concepts; his concepts may be excessively permeable. However, these data imply that clinicians may range rather widely along the permeability-impermeability dimension with little effect on descriptive accuracy. These limited data also suggest that the conceptualizations developed by the subjects in one group are no more diverse or homogeneous than are those of the other.

The clinician subjects seemed reluctant to treat client statements as noise, vis a vis to dismiss them as trivial or unimportant. At least, the exercise of the discard option did not differentiate the two groups. While the least accurate S, S8, exercised the discard option more frequently than any other S, there is no way of assessing the reliability of this result. More significant perhaps is the general reluctance of the clinician to part with his data; this reluctance is well illustrated by S3. As a client-centered therapist, S3's category of "non-self statements" is probably relatively unimportant, yet these statements are not discarded.

Theroretical differences did not differentiate among the subjects in terms of the descriptive accuracy criterion. Within the high accuracy group were client-centered, psychoanalytically oriented, eclectic, and neo-behaviorist therapists. In the less accurate group, were eclectic, existential, and psychoanalytic therapists, and one therapist (S8) who described himself as "cognitively oriented." It is to be noted that theory did not, as suggested by McArthur (1954) serve the function of

accounting for "maverick facts." In fact, when theoretical constructs (i.e. superego struggle) were apparent they were as apt to be employed in the more important as in the less important concepts. Nor did the role of theory seem as obscure as has been suggested previously (Elkin, 1947). Indeed, in such cases as those of S2, 3 and 6, the influence of personality theory is apparent throughout the therapist's conceptualization.

In testing for relations between similarity of concepts and accuracy, certain concepts had to be selected as a basis for comparison. While subjects vary widely in their terminology, they tend to agree in that they frequently link certain items together. These items, referred to as cluster items, are thought to reflect the presence of concepts fundamental to accurate prediction. Assuming this, it seemed plausible to score concepts for similarity which contained these cluster items. Using this method of selection, agreement, permeability and similarity scores were determined for each accuracy group as well as for between group comparisons. As indicated in Table 5, there were no consistent differences between groups in terms of similarity scores.

Being consistently rebuffed by rejection of hypothesis after hypothesis did not deter further attempts to gain insight into how clinicians think. On an ad hoc basis, the author began to examine the language used by the clinician to determine (1) what terms they used, and (2) how they articulated their concepts.

In analyzing the clinicians' terminology, the search was for frequently used expressions. Words having a common root (e.g. anxiety and anxious, sexual and heterosexual) were scored as equivalent unless the

context of usage implied different meanings (e.g. approach as "to move toward" and approach as "manner or style"). (To attempt to equate words having psychological equivalence but structural non-equivalence was seen as too subjective to be a useful undertaking.) Roughly 74 terms were used by these subjects; of these terms only 15 were used by more than one subject. The ten most used terms are reported in Table 4. Five of the eight subjects used the expression "feeling;" interestingly enough the term seemed most often to imply an intuitive sense (feeling of inadequacy, for example) rather than an affective state (feeling of fear, anxiety). The interpretive freedom of the psychotherapist is emphasized in these data -- what is a physical symptom to one is a psychosomatic complaint to another. The high popularity of certain terms with individual clinician's (S8's used the root sex 6 times) implied the presence of concepts which are transcendent, that is, concepts which were not represented because they cut across several others. Thus, while not employing the concept as such, S8 might well describe the client as having a "sexual preoccupation."

DISCUSSION

To date, the effort to differentiate the concepts of accurate describers from those of inaccurate describers has not been fruitful. The coneeptual models of the two accuracy groups were similar in terms of diversity, permeability of the concepts, and the amount of information incorporated. Moreover, there appeared to be no discernable relationship between accuracy of description and the theory employed by the describer. While much variance in the conceptualizations was tapped, it was quite unrelated to the accuracy criterion. It now seems apparent that

the research method as it is presently constituted reveals much about the idiosyncracies of clinicians and relatively little about the lawful thought processes which enable them to converge, as they did, on the criterion. At this point, revisions in the research method seem necessary to permit adequate tests of the author's model of clinical thinking.

Despite the lack of relationship with the criterion, the research task responses may reflect some important aspects of how clinicians think in psychotherapy. This is to suggest that the concepts they employ are by nature quite idiosyncratic. It seems likely that the practice of psychotherapy not only tolerates but is conducive to idiosyncratic expression. This conclusion accords with McArthur's (McArthur, 1958) as well as with the fact that there are, as a minimum estimate, 36 systems of psychotherapy (Harper, 1959) of which nearly all may be seen as variants of the same thing (Fiedler, 1951). The data gathered here suggest that personal counseling or psychotherapy is an occasion for the practice of some sort of interpersonal artistry. It seems possible that idiosyncratic expression may be called for in the practice of this art.

The relationship of the clinician with his clients is one thing and with his colleagues another. Stylistic variations in language and thoughts may produce concert in the therapy hour and dissonance in case conferences and professional meetings. Disagreement over verbage to be employed, rather than over constructs themselves, may impede advance in therapeutic procedure and training functions, as well as in research. Individual clinics if not practitioners generally should consider establishing a common set of dimensions useful in understanding, describing and anticipating client behavior.

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T A B L E 1

Concepts Employed by High Accuracy Clinicians

S1 - Counseling Psychologist - Eclectic — Accuracy Score .82

Importance of Concept	Concept	Number of Items
1	Insight into himself	9
2	Generally felt emotions; past or present	10
3	General development data	2
4	Intellectual versus emotional conflicts	7
5	Behavior or ideas not integrated by the client yet	20

S2 - Counseling-Clinical Psychologist - Neobehaviorist — Accuracy Score .77

Importance of Concept	Concept	Number of Items
1	General discomfort: Psychomatic complaints;motivation for therapy	6
2	Conflicts	5
3	Elaboration of conflicts	7
4	Feelings of personal inadequacy	10
5	Religious inhibitions (Barriers to approach)	8
6	Emotional feelings related to religion	3
7	Coping by experience	6
8	Coping by amelioration of superego	2
9	Discard	1

S3 - Counseling Psychologist - Client Centered Accuracy Score .75

Importance of Concept	Concept	Number of Items
1	General feelings about the self; feelings experienced in the immediate present	14
2	Feelings about the self with past frame of reverence	4
3	Analytically-oriented statement explaining his behavior	12
4	Statements oriented toward doing something about the situation	10
5	Non-self topics	8

S4 - Psychiatric Social Worker - Psychoanalytic Accuracy Score .70

Importance of Concept	Concept	Number of Items
1	Doubt about sexuality	13
2	Feelings of inadequacy	2
3	Rigidity-guilt	4
4	Feelings of insecurity	2
5	Intellectual approach to life	8
6	Conflicted about his guilt	10
7	Glimmer of change in self	9

T A B L E 2

Concepts Employed by Low Accuracy Clinicians

S5 - Psychiatric Social Worker - Psychoanalytic — Accuracy Score .28

Importance of Concept	Concept	Number of Items
1	Feelings about self; adequacy-inadequacy	8
2	Ambivalence about social relations	13
3	Superego struggle	7
4	Behavior on date	5
5	Feelings about sex	3
6	Feelings about girl friend	5
7	Feelings about religion (religious sources)	4
8	Physical symptoms (psychological effects)	3

S6 - Psychiatrist - Existential — Accuracy Score .22

Importance of Concept	Concept	Number of Items
1	Ambivalence of relations	7
2	Vicarious living	5
3	Superego mode of being in the world	8
4	Repetition of original developmental experience	4
5	Attempts at elucidation of relations with others	2
6	Physical expression of anxiety	2
7	Vacillating decision	2
8	Factual description of heterosexual contact	9
9	Intellectualization: literary editing	9

S7 - Psychiatric Social Worker - Psychoanalytic — Accuracy Score .08

Importance of Concept	Concept	Number of Items
1	Masculine Role Difficulties	24
2	Difficulty in relations with people	23
3	Discard	1

S8 - Counseling Psychologist - Cognitive Accuracy Score .08

Importance of Concept	Concept	Number of Items
1	Tendency toward Psychosexual Adjustment	3
2	Action toward Heterosexual Adjustment	5
3	Feelings toward Heterosexual Adjustment	5
4	Reasoning for tendency toward Psychosexual Adjustment	6
5	Analysis of Feelings and Actions Toward Heterosexual Adjustment	6
6	Reasoning for not moving toward Psychosexual Adjustment	2
7	General Ambivalent Attitudes and Feelings	2
8	Specific reinforcement and rationales for ambivalence	7
9	Discard	9

T A B L E 3

Similarity Scores By Accuracy Group

Item Cluster	Group	Scores Agreement	Permeability	Similarity
1.	High Accuracy	22	35	.63
	Low Accuracy	18	39	.46
	Both	39	74	.53
2.	High Accuracy	18	36	.50
	Low Accuracy	19	42	.45
	Both	43	78	.55
3.	High Accuracy	26	36	.72
	Low Accuracy	21	48	.44
	Both	50	84	.59
4.	High Accuracy	13	40	.32
	Low Accuracy	32	53	.70
	Both	46	93	.37
5.	High Accuracy	21	50	.42
	Low Accuracy	38	46	.82
	Both	58	96	.60

T A B L E 4

Ten Terms Used Most Frequently
By Eight Clinician-Subjects

	Number of Times Used	Number of Ss Using
Adjustment	6	1
Feeling	11	5
Ambivalence	3	4
Conflict	3	4
Religious	4	2
Self	4	4
Sex	4	9
Adequacy-inadequacy	3	3
Relations (social)	3	3
Superego	3	3